

WHAT IS CLAIMED IS:

1. A sealing gasket for closure, made of a polyurethane elastomer obtained by reacting the following (A) and (B):

(A) a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate, and

(B) a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups.

2. A sealing gasket for closure according to Claim 1, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to a uretdione-forming reaction, an isocyanurate-forming reaction and/or a urethanization reaction.

3. A sealing gasket for closure according to Claim 1, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to an isocyanurate-forming reaction and/or a urethanization reaction.

4. A sealing gasket for closure according to Claim 1, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of one or more high-molecular polyol(s).

5. A sealing gasket for closure according to Claim 1,

wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of a mixture of a high-molecular polyol and a low-molecular polyol.

5 6. A sealing gasket for closure according to Claim 1, wherein the polyurethane elastomer, when subjected to a retort treatment of 120°C x 30 minutes using 10 ml, per g of the polyurethane elastomer, of water, gives an extract showing a potassium permanganate consumption of 30 ppm or less.

10 7. A sealing gasket for closure according to Claim 1, wherein the polyurethane elastomer has a JIS A hardness of 10 to 70, a tensile strength of 1 to 40 MPa and a compression set of 0.1 to 60%.

15 8. A process for producing a closure, which comprises reacting the following (A) and (B) at the inner side of a closure to synthesize a polyurethane elastomer in such a state that the polyurethane elastomer is integrated with the closure:

20 (A) a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate, and

(B) a polyol component having a hydroxyl value of 20
25 to 350 mgKOH/g and average 2 to 3 functional groups.

9. A process for producing a closure according to Claim 8, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average

2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to a uretdione-forming reaction, an isocyanurate-forming reaction and/or a urethanization reaction.

5 10. A process for producing a closure according to Claim 8, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to an isocyanurate-forming reaction and/or a urethanization reaction.

10 11. A process for producing a closure according to Claim 8, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of one or more high-molecular polyol(s).

15 12. A process for producing a closure according to Claim 8, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of a mixture of a high-molecular polyol and a low-molecular polyol.

20 13. A process for producing a closure according to Claim 8, wherein the polyurethane elastomer, when subjected to a retort treatment of 120°C x 30 minutes using 10 ml, per g of the polyurethane elastomer, of water, gives an extract showing a potassium permanganate consumption of 30 ppm or less.

25 14. A process for producing a closure according to Claim 8, wherein the polyurethane elastomer has a JIS A hardness

of 10 to 70, a tensile strength of 1 to 40 MPa and a compression set of 0.1 to 60%.

15. A process for producing a closure, which comprises lining the inner side of a closure with the following (A) and (B) and then reacting the (A) and the (B) at 150 to 240°C for 20 to 200 seconds to synthesize a polyurethane elastomer in such a state that the polyurethane elastomer is integrated with the closure:

(A) a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate, and

(B) a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups.

16. A process for producing a closure according to Claim 15, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to a uretdione-forming reaction, an isocyanurate-forming reaction and/or a urethanization reaction.

17. A process for producing a closure according to Claim 15, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to an isocyanurate-forming reaction and/or a urethanization reaction.

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18. A process for producing a closure according to Claim 15, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of one or more high-molecular polyol(s).
- 5 19. A process for producing a closure according to Claim 15, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of a mixture of a high-molecular polyol and a low-molecular polyol.
- 10 20. A process for producing a closure according to Claim 15, wherein the polyurethane elastomer, when subjected to a retort treatment of 120°C x 30 minutes using 10 ml, per g of the polyurethane elastomer, of water, gives an extract showing a potassium permanganate consumption of 30 ppm or less.
- 15 21. A process for producing a closure according to Claim 15, wherein the polyurethane elastomer has a JIS A hardness of 10 to 70, a tensile strength of 1 to 40 MPa and a compression set of 0.1 to 60%.